

What is claimed is;

1. A chemical analysis system comprising
a means for spotting a sample liquid onto a first
chemical analysis element for measuring the concentration
of a specific component contained in the sample liquid,

a means for spotting a sample liquid and a
reference liquid onto a second chemical analysis element
for measuring the activity of a specific ion contained in
the sample liquid,

an incubator in which the first chemical analysis
element spotted with the sample liquid and/or the second
chemical analysis element spotted with the sample liquid
and the reference liquid is placed and which holds the
first and/or second chemical analysis element at a constant
temperature,

a concentration measuring means which is provided
to measure the concentration of the specific component
contained in the sample liquid by measuring the optical
density of the color formed by the coloring reaction of the
sample liquid and a reagent on the first chemical analysis
element after incubation in the incubator,

an ionic activity measuring means which is provided
to measure the ionic activity of the specific ion contained
in the sample liquid after incubation in the incubator, and

a temperature control means which holds the first
and/or second chemical analysis element at a predetermined

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temperature.

2. A chemical analysis system as defined in Claim 1 further provided with a chemical analysis element supply section which stores both the first and second chemical analysis elements, and a conveyor means for conveying the chemical analysis element in the chemical analysis element supply section to the incubator.

3. A chemical analysis system as defined in Claim 1 further provided with a detecting means which detects the position of the chemical analysis element in which the chemical analysis element is conveyed by reading a bar code provided on each of the chemical analysis element.

4. A chemical analysis system as defined in Claim 1 further provided with a diluting unit which includes a sample liquid container and dilutes the sample liquid in the container with diluent.

5. A chemical analysis system comprising
a means for spotting a sample liquid onto a first chemical analysis element for measuring the concentration of a specific component contained in the sample liquid,
a means for spotting a sample liquid and a reference liquid onto a second chemical analysis element for measuring the activity of a specific ion contained in the sample liquid,

an incubator in which the first chemical analysis element spotted with the sample liquid and/or the second

chemical analysis element spotted with the sample liquid and the reference liquid is placed and which holds the first and/or second chemical analysis element at a constant temperature,

5 a concentration measuring means which is provided to measure the concentration of the specific component contained in the sample liquid by measuring the optical density of the color formed by the coloring reaction of the sample liquid and a reagent on the first chemical analysis element after incubation in the incubator,

an ionic activity measuring means which is provided to measure the ionic activity of the specific ion contained in the sample liquid after incubation in the incubator, and

a temperature control means which holds the first chemical analysis element at a first predetermined temperature suitable for measuring the optical density of the color formed by the coloring reaction and holds the second chemical analysis element at a second predetermined temperature suitable for measuring the ionic activity.

20 6. A chemical analysis system as defined in Claim 5 further provided with a chemical analysis element supply section which stores both the first and second chemical analysis elements, and a conveyor means for conveying the chemical analysis element in the chemical analysis element supply section to the incubator.

25 7. A chemical analysis system as defined in Claim

5 further provided with a detecting means which detects the position of the chemical analysis element in which the chemical analysis element is conveyed by reading a bar code provided on each of the chemical analysis element.

5 8. A chemical analysis system as defined in Claim 5 further provided with a diluting unit which includes a sample liquid container and dilutes the sample liquid in the container with diluent.

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